

EXHIBIT 10



76. I also briefly respond to the lengthy, and largely irrelevant, background sections in the reports of Dr. Zimmerman, Dr. Wesel, and Dr. McNair.

77. Dr. Zimmerman cites many references in the background section of his report that do not support his invalidity opinions, including the ATM Form Technical Committee Inverse Multiplexing for ATM (IMA) Specification, IEEE and ANSI documents, and other documents.

78. I have reviewed these references. They are irrelevant to invalidity because either alone, or in combination with any other prior art reference they do not anticipate or render obvious any Asserted Claim. Indeed, even Dr. Zimmerman does not assert that these references (with the exceptions of the documents I discuss below) alone or in combination render the Asserted Claims obvious. I reserve the right to respond, should he offer such an opinion at a later time. For the documents that Dr. Zimmerman does rely on for his invalidity opinions, I have responded to those below.

79. Dr. Wesel cites many references in the background section of his report that do not support his invalidity opinions. For example, general references to the use of FEC, interleaving, and multicarrier modulation in the prior art does not disclose the novel and non-obvious combinations of the Asserted Claims.

80. I have reviewed these references. They are irrelevant because either alone, or in combination with any other prior art reference they do not anticipate or render obvious any Asserted Claim. Indeed, even Dr. Wesel does not assert that this references alone or in combination render the Asserted Claims obvious. I reserve the right to respond, should he offer such an opinion at a later time.

81. As I discuss further below, the background section of the Wesel Family 9 Report mischaracterizes the prior art and misuses the terms “shared memory” and “configuration

126. One way to compensate for a large difference in latency between bonded transceivers is for the multiplexing receiver to use a large buffer while waiting for all packets to be received. This is disadvantageous, however, at least because a larger buffer increases the size of the memory and, therefore, the cost of DSL equipment.

127. Another way to compensate for a difference in latency is to configure the bonded lines to have “the exact same data rate, coding parameters, interleaving parameters, etc. on all DSL PHYs.”¹³ This is also disadvantageous, however, at least because it results in wasted bandwidth. For example, the maximum achievable data rate for one twisted pair will very likely be different for another twisted pair. If all bonded lines within a group were configured for the same data rate, the data rate would be the lowest rate among the bonded group, thereby wasting the additional bandwidth achievable by the other members.

128. The novel systems and methods of the Family 2 Patents solve the problem of differential latency while permitting the transceivers to operate at different data rates: “[D]ifferent PHYs can have, for example, different data rates but use the appropriate coding or interleaving parameters to have the same latency on all the bonded PHYs.”¹⁴ An example embodiment of the inventions, one that reduces the difference in latency to zero, is described in the Family 2 Patents as follows.¹⁵

As an example, for Reed Solomon coding and interleaving functions as defined in ADSL standards G.992.1 and G.992.3, incorporated herein by reference in their entirety, the latency due to these functions is defined as:

$$\text{Latency} = N * D / R,$$

where N is the number of bits in a codeword, D is the interleaver

¹³ See, e.g., '881 Patent at 6:52-62.

¹⁴ See, e.g., '881 Patent at 6:62-65.

¹⁵ See, e.g., '881 Patent at 6:66-7:36.